

In the Claims:

The presently pending claims are as follows:

1. (previously presented) A brake disc, comprising:

a hub portion;

a friction portion, said friction portion formed as a generally planar ring; and

a connecting flange portion, wherein

the connecting flange portion connects a radially outer region of the hub portion to a radially inner region of the friction portion radially inward from a radially inner-most friction surface of said friction portion,

the connecting flange portion has a length such that when the hub portion and a wheel rim adapted to be mounted on a hub end of a vehicle axle are located at the hub end of the axle, the friction portion is outboard of the wheel rim, and

the friction portion has an outer radius greater than a greatest inner radius of the wheel rim.

2. (original) The brake disc of claim 1, wherein the connecting flange portion is cylindrical.

3. (original) The brake disc of claim 1, wherein the brake disc is a one-piece brake disc.

4. (original) The brake disc of claim 1, wherein at least one heat-conduction limiting section is provided on at least one of the connecting flange portion and the friction portion.

5. (original) The brake disc of claim 4, wherein the at least one heat-conduction limiting section includes a section having a reduced thickness.

6. (original) The brake disc of claim 5, wherein the reduced thickness section is shaped as a ring.

7. (original) The brake disc of claim 1, wherein at least one ventilation aperture is provided in the connecting flange portion.

8. (original) The brake disc of claim 5, wherein at least one ventilation aperture is provided in the connecting flange portion.

9. (original) The brake disc of claim 6, wherein at least one ventilation aperture is provided in the connecting flange portion.

10. (original) The brake disc of claim 1, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

11. (original) The brake disc of claim 5, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

12. (original) The brake disc of claim 6, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

13. (original) The brake disc of claim 7, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

14. (original) The brake disc of claim 8, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

15. (original) The brake disc of claim 9, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

16. (previously presented) A vehicle axle assembly, comprising:
a vehicle axle; and

a disc brake disposed at a hub end of the vehicle axle, the disc brake including:

a brake caliper adapted to be affixed to a caliper mount on the vehicle axle, and

a brake disc disposed on the hub end of the vehicle axle such that a braking force generated by the brake caliper is applied to the brake disc, the brake disc including:

a hub portion;

a friction portion, said friction portion formed as a generally planar ring; and

a connecting flange portion, wherein

the connecting flange portion connects a radially outer region of the hub portion to a radially inner region of the friction portion radially inward from a radially inner-most friction surface of said friction portion,

the connecting flange portion has a length such that when the hub portion and a wheel rim adapted to be mounted on a hub end of a vehicle axle are located at the hub end of the axle, the friction portion is outboard of the wheel rim, and the friction portion has an outer radius greater than a greatest inner radius of the wheel rim.

17. (original) The axle assembly of claim 16, wherein at least one heat-conduction limiting section is provided on at least one of the connecting flange portion and the friction portion.

18. (original) The axle assembly of claim 17, wherein the at least one heat-conduction limiting section includes a section having a reduced thickness.

19. (original) The axle assembly of claim 18, wherein the reduced thickness section is shaped as a ring.

20. (original) The axle assembly of claim 16, wherein at least one ventilation aperture is provided in the connecting flange portion.

21. (original) The axle assembly of claim 18, wherein at least one ventilation aperture is provided in the connecting flange portion.

22. (original) The axle assembly of claim 19, wherein at least one ventilation aperture is provided in the connecting flange portion.

23. (original) The axle assembly of claim 16, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

24. (original) The axle assembly of claim 18, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

25. (original) The axle assembly of claim 19, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

26. (original) The axle assembly of claim 20, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

27. (original) The axle assembly of claim 21, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.

28. (original) The axle assembly of claim 22, wherein a plurality of cooling fins are disposed about an inner radius of the friction portion.